

Title (en)
MAGNETIC DRIVE PUMP

Title (de)
MAGNETANTRIEBSPUMPE

Title (fr)
POMPE À ENTRAÎNEMENT MAGNÉTIQUE

Publication
EP 3246575 A1 20171122 (EN)

Application
EP 17175989 A 20121024

Priority
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• EP 12189730 A 20121024

Abstract (en)
The disclosure offers a sealless magnetic drive pump for improving the stiffness of a stationary shaft (3), and more particularly to, a metal magnetic drive pump with an anti-corrosion casing liner (4a). The magnetic drive pump is used in manufacture processes related to corrosive fluid. The pump is especially used in a highly corrosive and high-temperature (up to 200 °C) condition to improve the stiffness of a front support. The stationary shaft includes a metal front support (43) integrated with the pump casing (4) at a pump inlet (44) and encapsulated with a resin enclosure made of a fluoropolymer; a rear shaft seat (413) positioned on a sealed bottom side of a containment shell (41) for offering auxiliary support for the stationary shaft (3); an impeller (5) including a channel for reducing an inlet flow velocity to offer a low NPSHr.

IPC 8 full level
F04D 13/02 (2006.01); **F04D 29/047** (2006.01)

CPC (source: EP KR US)
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Citation (applicant)
• US 7033146 B2 20060425 - SHI CHI-WEI [TW]
• US 7057320 B2 20060606 - ABORDI MAURIZIO [IT], et al
• CN 2482597 Y 20020320 - CHINA PETROLEUM GROUP CORP [CN]
• US 5895203 A 19990420 - KLEIN MANFRED P [US]
• US 6280156 B1 20010828 - WIRZ PETER [CH], et al
• US 7101158 B2 20060905 - HEMBREE RICHARD D [US], et al
• US 7249939 B2 20070731 - YANAGIHARA TOSHINORI [JP], et al
• US 6293772 B1 20010925 - BROWN JEFFREY S [US], et al

Citation (search report)
• [AD] US 5895203 A 19990420 - KLEIN MANFRED P [US]
• [A] EP 1460272 A2 20040922 - IWAKI CO LTD [JP]
• [A] GB 2181184 A 19870415 - NGK INSULATORS LTD
• [AD] CN 2482597 Y 20020320 - CHINA PETROLEUM GROUP CORP [CN]

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EP 12189730 A 20121024; EP 17175989 A 20121024; EP 17176026 A 20121024; ES 12189730 T 20121024; ES 17175989 T 20121024; ES 17176026 T 20121024; JP 2012232806 A 20121022; JP 2014002522 A 20140109; KR 20120123464 A 20121102; RU 2012146840 A 20121102; TW 100140138 A 20111103; US 201213657563 A 20121022; US 201715582744 A 20170430; US 201715582745 A 20170430